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SEATTLE, WA 98111-1208				
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CHACKO, SUNIL				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/582,183

**Applicant(s)**

SHIMOKAWA ET AL.

**Examiner**

SUNIL CHACKO

**Art Unit**

2625

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 & 5-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 5-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/22)  
Paper No(s)/Mail Date 08/04/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. Applicant's request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/15/2009 has been entered.

### ***Response to Amendment***

2. Applicant's amendment filed on 10/08/2009 has been entered. Claims 1, 5, 6, & 7 have been amended. Claims 3 & 4 have been canceled. Claims 1, 2, & 5-7 are still pending in this application, with claims 1, 5, 6, & 7 being independent.

3. The information disclosure statements (IDS) submitted on 08/04/2009. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Response to Arguments***

4. With respect to claims 1, 2, & 5-7 the applicant argues his invention is characterized by the print data being subjected to elongation or contraction correction before the print data is binarized and that none of the cited references disclose or suggest this feature. Examiner respectfully disagrees, Endo et al teaches that the print data is calculated by using the following formulas:  $\Delta X = (W + w1Fi + w2Fi)/n$  and  $\Delta Y = (H + hFi)$ . W and H are image data information while w1Fi, w2Fi, & hFi are correction factors, see column 6 lines 60-67 and column 7 lines 1-4. The corrections are combined to with image data to create the binarized print data that is used by the printing press.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1& 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weichmann et al (US Patent # 6,580,524 B1) in view of Endo et al. (US Patent # 6,637,327 B2) in further view of Shiraishi (US Patent # 6,999,200 B2)

*As to Claim 1,*

- Weichmann et al teaches *a plurality of print data to adjust one or more of position and shape of a print image is created without performing mechanical position or shape correction in a printing device*, (See abstract, Weichmann teaches that all processing for image correction occur before the actual printing therefor the machine does not perform mechanical or shape correction)
- *wherein each of the plurality of print data includes an image type data for at least one image type constituting the corresponding print image, and a position data for determining at least one of an image type position data corresponding to a position of the image type in the print image and an image type shape data indicating a shape of the image type*, (See column 4 lines 17-23, Weichmann et al. further teaches his method uses PostScript Format (PSF), which represents the image, including the position data and image position)

Weichmann et al. does not disclose the following limitations:

- *wherein creating the print data includes: determining deformation information on an amount of elongation or contraction in a direction in which the printing medium is to be elongated or contracted based on a previously printed print image when the previously printed print image is made in a printing operation for the plurality of print images on the printing medium by the use of the plurality of printing plates*
- *adjusting one or more of the position and the shape of the print image without performing mechanical position or shape correction in the printing device including correcting at least one image type data constituting at least one of the*

*plurality of print images in terms of elongation or contraction in the direction in which the printing medium is to be elongated or contracted, by changing the position of the image type data and the shape of the image type data on the basis of the corresponding position data and the deformation information of the previously printed print image; and generating the print data obtained by binarizing the print data subjected to the correction in terms of elongation or contraction.*

However, Endo et al. teaches a control apparatus for a multicolor printing press. Endo et al. also teaches a method of correction for elongation or contraction errors that takes place in the printing medium during the printing process. Endo et al. teaches that the his method does not perform mechanical or shape correction instead uses a previously printed image to correct for elongation or contraction errors, See column 7 lines 37-43. Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors, See column 7 lines 44-48. It would have been obvious to one skilled in the art at the time of the invention to combine Weichmann et al. in view of Endo et al. because it would provide the user with quality prints.

Weichmann et al. in view of Endo et al. does not disclose the following limitations:

- *a method of creating print data, in which prior to creating binary image data in a raster image processor (RIP) including a plurality of printing-plate creation data for respectively creating a plurality of printing plates for sequentially printing a plurality of print images on a printing medium using the plurality of printing plates*

However, Shiraishi et al teaches a method and device for managing image data processing. Shiraishi et al teaches a process in which printing plates are formed on the basis of binary image data, and then converted into RIP, then are printed on sheets of printing paper yours printing plates, See column 1 lines 9 -13. It would have been obvious to one skilled in the art at the time of the invention to combine Weichmann et al in view of Endo et al. in further view of Shiraishi because it would provide a printing system with a plurality of printing plates the ability to produce quality prints, without producing a test print.

*As to Claim 2 which depends on Claim 1,*

Weichmann et al. in view of Endo et al. in further view of Shiraishi further teaches *the method of creating print data,*

- *wherein the deformation information corresponds to a print condition of the printing medium when each print is made, (See Weichmann et al. column 6 lines 30-35)*
- *wherein the deformation information is stored in a deformation information table, and the deformation information in the deformation information table is automatically set on the basis of the print condition when elongation or contraction correction is performed. (See Weichmann et al column 7 lines 39-50)*

7. Claim 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Endo et al. (US Patent # 6,637,327 B2) in view of Weichmann et al (US Patent # 6,580,524 B1) in further view of Shiraishi (US Patent # 6,999,200 B2)

*As to Claim 5,*

- Endo et al. teaches *an article of manufacture comprising: a computer-readable storage media providing instructions which, when executed by a computer, cause the computer to perform a method for adjusting one or more of position and shape of a print image without performing mechanical position correction in a printing device, the instructions including:* (See, column 5 lines 1-8)
- *wherein the instructions to create the print data for the print image includes: instructions to determine deformation information of a print image downstream from the print image during printing of the downstream print image in the printing device, the deformation information indicating an amount of elongation or contraction correction to be applied to the printing medium in a direction the printing medium is to be elongated or contracted;* (See column 7 lines 37-43, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)
- *instructions to adjust one or more of the position and the shape of the print image without performing mechanical position or shape correction in the printing device including correcting the image type data of the print image by changing the position of the image type data in the print image and the shape of the image*



*type data in the print image based on corresponding position data and the deformation information of the downstream print image; and instructions for generating the print data obtained by binarizing the print data for the print image based on the corrected image type data of the print image to match print positions of the print image with corresponding print positions of the downstream print image. (See column 7 lines 44-48, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)*

Endo et al. does not disclose the following limitations:

- *wherein the print data for the print image includes an image type data for an image type corresponding to the print image, and a position data for determining one or more of an image type position data corresponding to a position of the image type in the print image and an image type shape data indicating a shape of the image type in the print image,*

However, Weichmann et al. teaches a method of controlling a permanent printing plate. Weichmann et al. further teaches his method uses PostScript Format (PSF), which represents the image, including the position data, image position and shape, see column 4 lines 17-23. It would have been obvious at the time of the invention for one skilled in the art to combine Endo et al. in view of Weichmann et al. because it allows the printing system to have a computer program that would create high quality prints without defects caused by contraction and elongation of the printing medium. Endo et al. in view of Weichmann et al. does not disclose the following limitation.

- *instructions to create print data for the print image prior to creating binary image data including printing-plate creation data for printing the print image on a printing medium using a plurality of printing plates,*

However, Shiraishi et al teaches a method and device for managing image data processing. Shiraishi et al teaches a process in which printing plates are formed on the basis of binary image data, and then converted into RIP, then are printed on sheets of printing paper yours printing plates, See column 1 lines 9 -13. It would have been obvious to one skilled in the art at the time of the invention to combine, Endo et al in view of Weichmann et al. in further view of Shiraishi, because it would create an efficient computer program that would eliminate the need for unnecessary test prints.

*As to Claim 6,*

- *Endo et al. teaches an article of manufacture comprising: a computer-readable recording medium containing instructions, which when executed by a computer, cause the computer to perform a method for creating print data, the instructions including: (See, column 5 lines 1-8)*
- *wherein the instructions for creating the print data include: instructions to determine deformation information on an amount of elongation or contraction in a direction in which the printing medium is to be elongated or contracted based on a previously printed print image while the previously printed print image is being printed to the printing medium using the plurality of printing plates; (See column 7*

lines 37-43, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)

- *instructions to adjust one or more of the position and the shape of the print image without performing mechanical position or shape correction in the printing device including correcting the image type data of the print image in terms of elongation or contraction in the direction in which the printing medium is to be elongated or contracted by changing the position of the image type data and the shape of the image type data based on corresponding position data and the deformation information of the previously printed print image; and instructions to generate the print data obtained by binarizing the print data for the print image subjected to the elongation or contraction correction.* (See column 7 lines 44-48, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)

Endo et al. does not disclose the following limitations:

- *wherein the print data includes an image type data including an image type of the print image and a position data including one or more of an image type position data corresponding to a position of the image type in the print image and an image type shape data indicating a shape of the image type in the print image,*

However, Weichmann et al. teaches a method of controlling a permanent printing plate.

Weichmann et al. further teaches his method uses PostScript Format (PSF), which represents the image, including the position data, image position and shape, see

column 4 lines 17-23. It would have been obvious at the time of the invention for one

skilled in the art to combine Endo et al. in view of Weichmann et al. because it allows the printing system to have a computer program that would create high quality prints without defects caused by contraction and elongation of the printing medium.

Endo et al. in view of Weichmann et al. does not disclose the following limitation;

- *instructions to create print data for printing a print image in a printing device, in which the print data is created before creating binary image data including a plurality of printing-plate creation data for printing the print image on a printing medium using a plurality of printing plates,*

However, Shiraishi et al teaches a method and device for managing image data processing. Shiraishi et al teaches a process in which printing plates are formed on the basis of binary image data, and then converted into RIP, then are printed on sheets of printing paper yours printing plates, See column 1 lines 9 -13. It would have been obvious to one skilled in the art at the time of the invention to combine, Endo et al in view of Weichmann et al. in further view of Shiraishi, because it would create a an efficient computer program that would eliminate the need for unnecessary test prints.

*As to Claim 7*

- Endo et al teaches *wherein creating the print data for the print image includes: determining deformation information of a print image downstream from the print image during printing of the downstream print image, the deformation information including an amount of elongation or contraction correction to be applied to the printing medium in a direction the printing medium is to be elongated or*

*contracted; (See column 7 lines 37-43, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)*

- adjusting one or more of the position and the shape of the print image without performing mechanical position or shape correction in the printing device including correcting the image type data of the print image by changing the position of the image type data and the shape of the image type data based on the deformation information of the downstream print image; and generating the print data obtained by binarizing the print data for the print image based on the corrected image type data to match print positions of the print image with corresponding print positions of the downstream print image. (See column 7 lines 44-48, Endo goes on to teach that the print data is corrected by adding error values to the horizontal and vertical directions to accommodate for the errors)*

Endo et al. does not disclose the following limitations:

- wherein the print data includes image type data corresponding to an image type of the print image, and a position data for determining one or more of an image type position data corresponding to a position of the image type in the print image and an image type shape data indicating a shape of the image type in the print image,*

However, Weichmann et al. teaches a method of controlling a permanent printing plate.

Weichmann et al. further teaches his method uses PostScript Format (PSF), which represents the image, including the position data, image position and shape, see

column 4 lines 17-23. It would have been obvious at the time of the invention for one skilled in the art to combine Endo et al. in view of Weichmann et al. because it allows the printing system create a high quality prints without defects caused by contraction and elongation of the printing medium.

Endo et al. in view of Weichmann et al. does not disclose the following limitation:

- *A method comprising: creating print data for a print image prior to creating binary image data in a raster image processor (RIP) including printing-plate creation data for printing the print image on a printing medium using a plurality of printing plates in a printing device,*

However, Shiraishi et al teaches a method and device for managing image data processing. Shiraishi et al teaches a process in which printing plates are formed on the basis of binary image data, and then converted into RIP, then are printed on sheets of printing paper yours printing plates, See column 1 lines 9 -13. It would have been obvious to one skilled in the art at the time of the invention to combine, Endo et al in view of Weichmann et al. in further view of Shiraishi, because it would create a an efficient method that would eliminate the need for unnecessary test prints.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUNIL CHACKO whose telephone number is (571)270-7221. The examiner can normally be reached on Mon-Thurs 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Q. Tieu can be reached on 571-272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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